The following recitation of claims supersedes all previous recitations.

In the Claims:

1. (Currently Amended) An ionic compound comprising a cation which is a complex of a neutral ~~organic~~ liqand selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of Ag^{+}, Zn^{2+}, Cu^{2+}, Cd^{2+}, Ni^{2+}, Hg^{2+}, Co^{3+} and Fe^{3+} and an anion which is a conjugate anion of the metal ion.

2. (Previously Presented) An ionic compound according to claim 1 which is a liquid below 100°C.

3. (Previously Presented) An ionic compound according to claim 2 which is a liquid at room temperature.

4. (Previously Presented) An ionic compound according to claim 1 which is electrically conductive in the absence of a solvent.

5. (Previously Presented) An ionic liquid according to claim 1 which is hydrophobic.

6. (Previously Presented) An ionic compound according to claim 1 wherein said neutral organic liqand is a crown ether.

7. (Previously Presented) An ionic liquid according to claim 1 wherein the neutral organic liqand is at least one alkyl amine.

8. (Previously Presented) An ionic compound according to claim 1 wherein said conjugate anion is bis(trifluoromethane)sulfonimide, boron trifluoride, nitrate, sulfate, phosphate, hexafluorophosphate and dicyanamide.

9. (Currently Amended) A method for forming an ionic liquid comprising mixing a neutral ~~organic~~ liqand selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of Na^+, K^+, Li^+, Ca^{2+}, Ag^+, Zn^{2+}, Cu^{2+}, Cd^{2+}, Ni^{2+}, Hg^{2+}, and Fe^{3+} and with the salt of a metal cation and its conjugate anion at room temperature.

10. (Original) A method according to claim 9 wherein said neutral organic ligand is a crown ether.

11. (Original) A method according to claim 10 wherein the metal cation is selected from the group consisting of sodium potassium, lithium and calcium.

12. (Original) A method according to claim 9 wherein said neutral organic ligand is an alkylamine.

13. (Original) A method according to claim 12 wherein said metal cation is selected from the group consisting of silver, zinc, copper, cadmium, nickel, mercury and iron.

14. (Currently Amended) A method according to claim 9 wherein said conjugate anion is bis(trifluoromethane)sulfonamide, boron trifluoride, nitrate, sulfate, phosphate, hexafluorophosphate and dicyanamide, selected from the group consisting of organic amines and crown ethers with a metal ion selected from the group consisting of Na^+, K^+, Li^+, Ca^{2+}, Ag^+, Zn^{2+}, Cu^{2+}, Cd^{2+}, Ni^{2+}, Hg^{2+}, and Fe^{3+} and an anion which is a conjugate anion of the metal ion.

15. (Original) A method according to claim 9 which is performed at room temperature.

16. (Previously Presented) An ionic compound according to claim 1 which may be used as a solvent.

17. (Previously Presented) An ionic compound according to claim 1 which may be used for gas liquid separation.

18. (Previously Presented) An ionic compound according to claim 1 which may be used for solvent extraction.

19. (Previously Presented) An ionic compound according to claim 4 which is used in electrical devices.

20. (Previously Presented) An ionic compound according to claim 1 which is used as a heat transfer fluid.